

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/865,394	HAND ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ting Zhou	2173	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 29 June 2006.
2. ☒ The allowed claim(s) is/are 1,2,4,6-8,10 and 12-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. The amendment filed on 29 June 2006 have been received and entered. Claims 1-2, 4, 6-8, 10 and 12-20 as amended are pending in the application.

#### ***Allowable Subject Matter***

2. Claims 1-2, 4, 6-8, 10 and 12-20 are allowed.
3. The following is an examiner's statement of reasons for allowance: The present invention teaches data monitoring and presentation via a method for efficiently exposing nodes on a map while monitoring components within a complex heterogeneous system. Each of the independent claims identifies the distinct feature of discrete quantized value obtained by quantizing a range of continuous data based upon a user-supplied instruction, converting the at least one data metric into an updated quantized value obtained by quantizing another range of continuous data based upon another user-supplied instruction and a display map that simultaneously displays the display elements in a planar fashion connected by visual lines illustrating communication links existing between each of the nodes represented by the display elements. The closest prior art, Chari et al. U.S. Patent 6,046,742 (hereinafter "Chari") and Jancke et al. U.S. Patent 5,764,913 (hereinafter "Jancke") teach a method for monitoring components of network and displaying the component nodes on a display map. In the case of the Chari reference, Chari teaches obtaining from a display map, at least one reference to at least one node, wherein each node is associated with a display element displayable in the display map (the management window displays a plurality of nodes, or system components associated with

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display elements, or icons on the map window) (Chari: column 4, lines 41-58, column 6, lines 19-33 and column 10, line 63 – column 11, line 35; this is further shown in Figure 6), and wherein each node has a plurality of selectively presentable attributes (the nodes of the system, i.e. the displayed icons representing system components in the left hand side of the System Management Window 600 can be selected to present, or display, the associated attributes, such as children components associated with the parent node, which are selectively displayed via expanding the parent node) (Chari: column 11, line 61 – column 12, line 32, column 13, lines 16-37 and column 14, lines 49-63; this is further shown in Figure 24), and wherein each node represents a component in a complex heterogeneous system (the nodes are components in a computer network) (Chari: column 4, lines 41-58 and column 8, line 65 - column 9, line 4), and wherein each display element is capable of simultaneously displaying a plurality of attributes of an associated node (the nodes, or devices represented by the icons have associated forms with a plurality of attributes; for example, as shown in Figure 16, the forms displaying a plurality of attributes, or variables for a selected icon, or display element is displayed on the right-hand side of the interface; a similar form displaying a plurality of attributes is shown in Figures 14 and 17) (Chari: column 12, lines 6-18 and column 13, lines 56-60); receiving at least one data metric from the component (users can browse through the MIB-defined variables, or nodes, which represent data concerning all the hardware and software components in a computer network; the parameters representing the components are organized into hierarchical levels, as shown in Figure 6; users can display forms associated with variables and change the value of the variables) (Chari: column 6, lines 28-32 and column 14, lines 49-63), converting the at least one data metric into an updated

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value and providing an updated value to the display map, the display map updating the display element in the display map to reflect the updated value (modifying one of the operational parameters representing a component and updating the status of the component corresponding to the modification; users can update a data metric value, or variable, via input on the displayed form of the display element, i.e. the forms containing the component variable parameters are updated on the display as the user enters a variable value; after the user updates the display map with the newly entered variable value, the MIB manager implements the user's changes) (Chari: column 6, lines 62 - column 7, line 27, column 14, line 49 – column 15, line 5 and column 20, lines 54-58), wherein the obtaining, receiving, converting and providing steps are performed within a software agent (SNMP agent), wherein the software agent is a platform-independent software object (the network can contain many servers connected to the network, and each network is represented by a SNMP agent, which is a software agent, that acts as an intermediary between the server components and the network; the SNMP agent receives requests for data from the SNMP manager, retrieves the corresponding data, and displays it on the display map; the data could be one of the plurality of operational parameters about different components in the network) (Chari: column 2, lines 3-14, column 6, line 62 - column 7, line 25, column 9, lines 34-42 and column 13, lines 24-37), and wherein the display map simultaneously displays the display elements in a planar fashion (as shown in Figure 6 for example, the display elements, or icons representing the system components are displayed in a two-dimensional plane) (Chari: column 4, lines 41-58 and Figure 6). In the case of the Jancke reference, Jancke teaches the display of a graphical user interface comprising a hierarchical display of nodes similar to that of Chari. In

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addition, Jancke further teaches wherein each attribute is alternately presented in one of a plurality of pre-selected visual formats, each visual format corresponding to a different discrete quantized value (each of the nodes on the display is accompanied by an individual operational state icon that takes one of a plurality of different discrete forms, or values; for example, the state indicators can be of one of the eight values shown in Figure 4) (Jancke: column 2, lines 42-60 and column 3, lines 7-55). The prior art does not teach that the quantization of continuous data can explicitly be based on a quantized value dictated by a user-supplied instruction and simultaneously displaying elements corresponding to a plurality of nodes wherein the various display elements are connected by visual lines that illustrate the physical communication links existing between each of the actual nodes represented by the display elements. Thus, the prior art fails to anticipate or render the above limitations obvious.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 7:00 am - 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TZ



KIEU D. VU

Primary Examiner